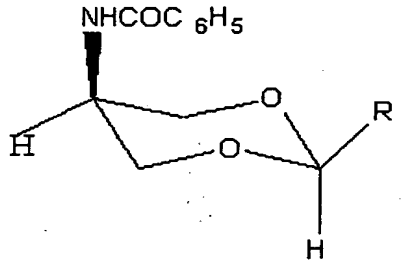
Claims

What is claimed is:

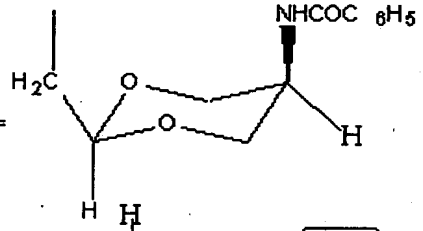
1. The application of a compound selected from the group consisting of 5-benzoylamino-1,3-dioxacyclane derivatives represented by the following formulae 1-48 in preparing protein kinase inhibitors:



(1-4,22,30,34,38,41,45)

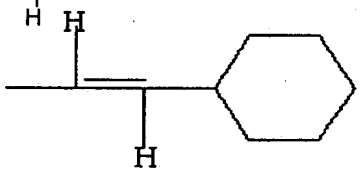
1. R=-$CH_2CH(OCH_3)_2$; 2. R=-$CH_2CH(OCH_3)OCH_2CH_3$

3. R=-CH_2- 

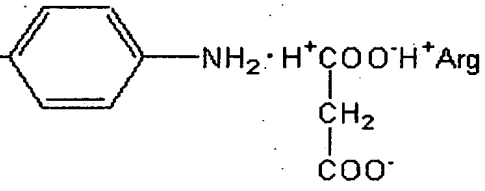
; 4. R= 

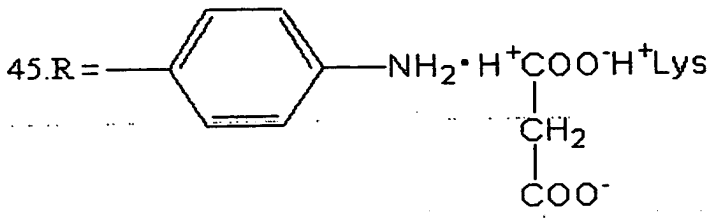
22. R=P-NO_2-C_6H_4

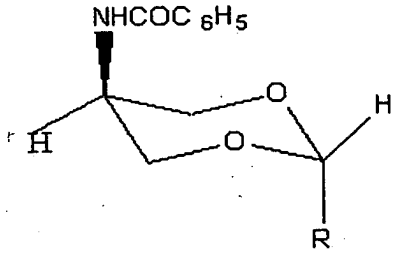
30. R=P-NH_2-C_6H_4

34. R= 

38. R=CH_2CHO

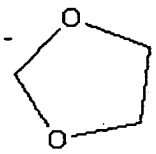
41.R = 

45.R = 

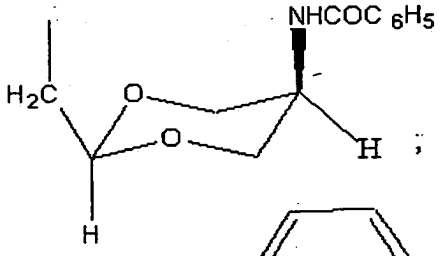


(5-8,23,35)

5. R=-$CH_2CH(OCH_3)_2$; 6. R=-$CH_2CH(OCH_3)OCH_2CH_3$

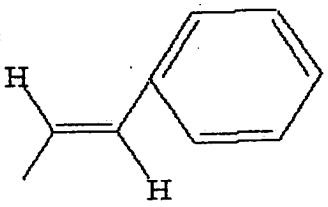
7. R=-CH_2- 

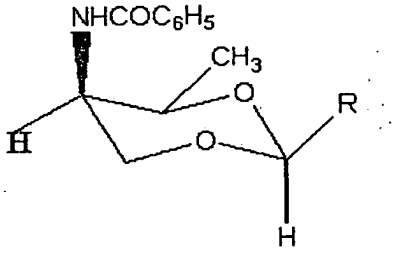
;

8. R= 

;

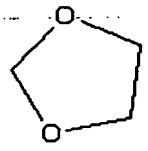
23. R= P-NO_2-C_6H_4 ;

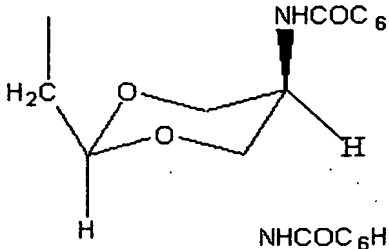
35. R= 

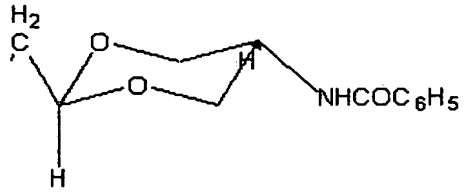


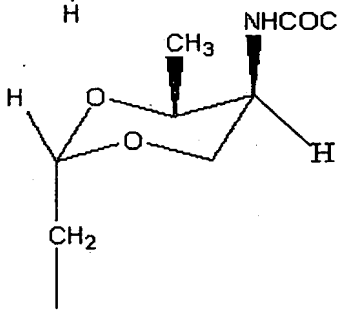
(9-17,25,31,36,39,42,46)

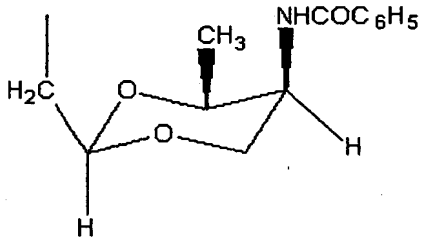
9. R=-$CH_2CH(OCH_3)_2$; 10. R=-$CH_2CH(OCH_3)OCH_2CH_3$;

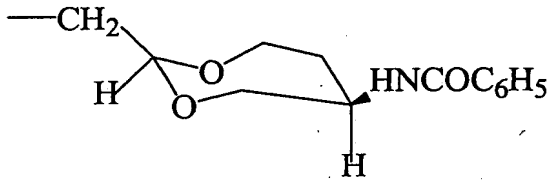
11. R=-$CH_2CH(OC_2H_5)_2$ 12. R=-CH_2-  ;

13. R= 

14. R= 

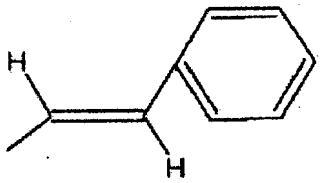
15. R= 

16. R= 

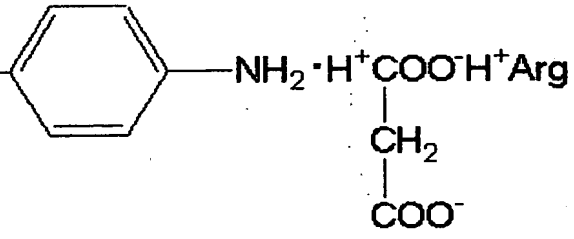
17, R= 

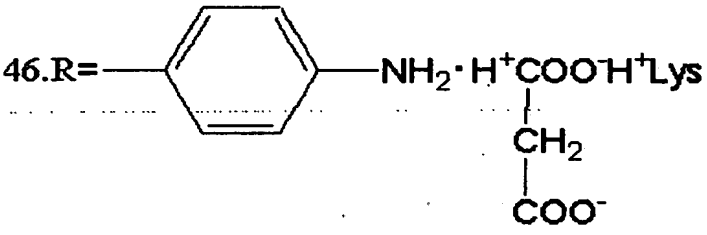
25. R= P-NO_2-C_6H_4 ;

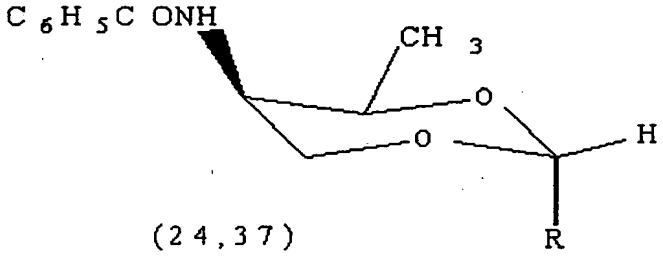
31. R=P-NH_2-C_6H_4 ;

36. R=  ;

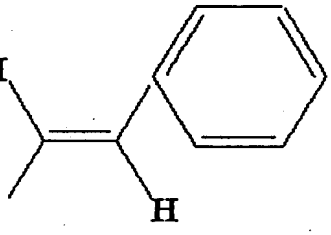
39. R=CH_2CHO

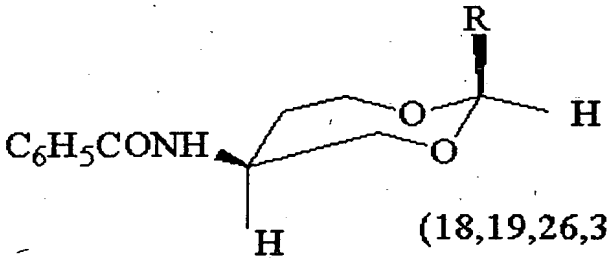
42.R= 

46.R= 



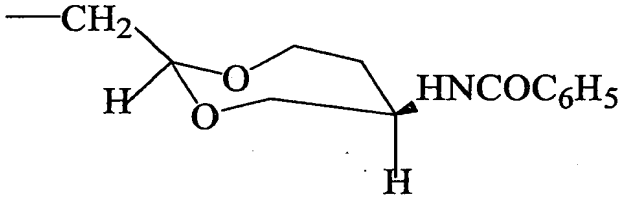
(24,37)

24. R= P-NO_2-C_6H_4 ; 37. R= 



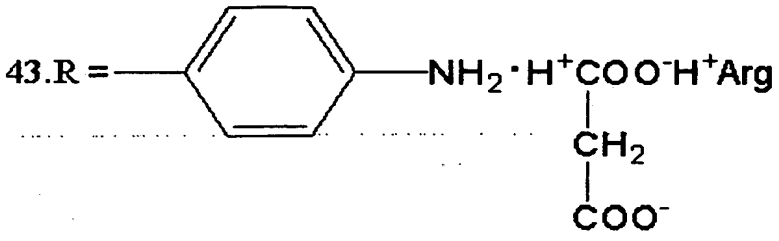
(18,19,26,32,40,43,47)

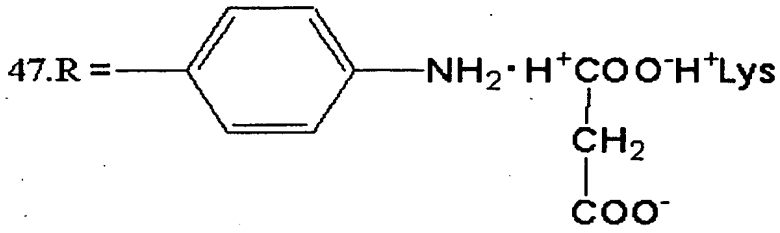
18, R= -$CH_2CH(OCH_3)_2$;

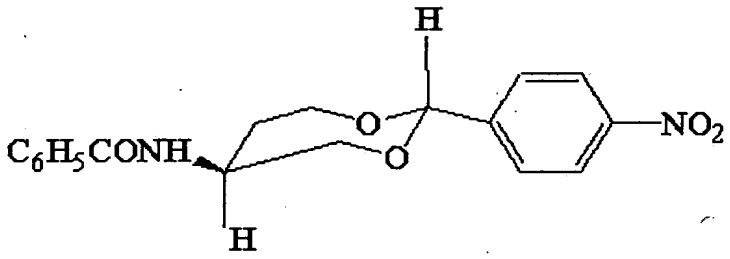
19, R= 

26. R= P-NO_2-C_6H_4 ; 32. R= P-NH_2-C_6H_4

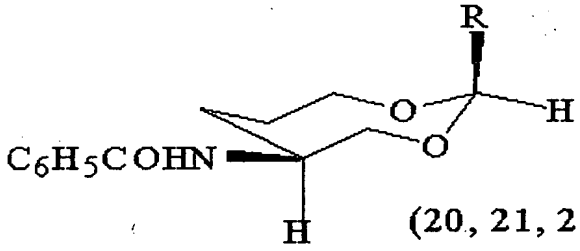
40. R= CH_2CHO ;







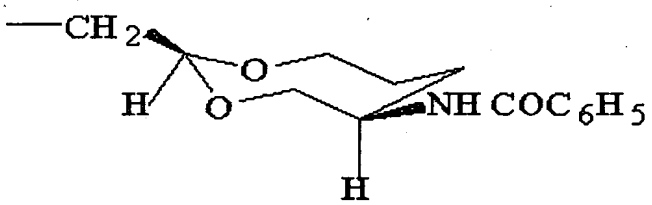
(27)



(20, 21, 28, 33,44,48)

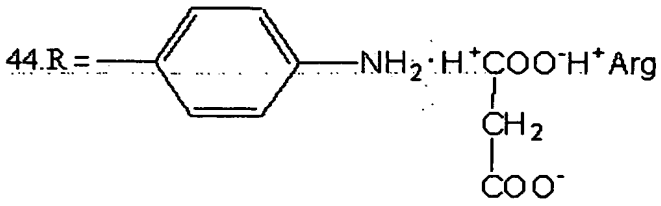
20 , R=C H_2CH(OCH_3)$_2$;

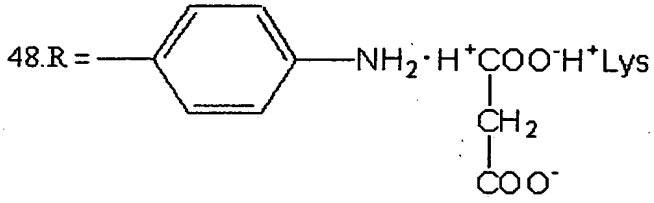
21 , R=

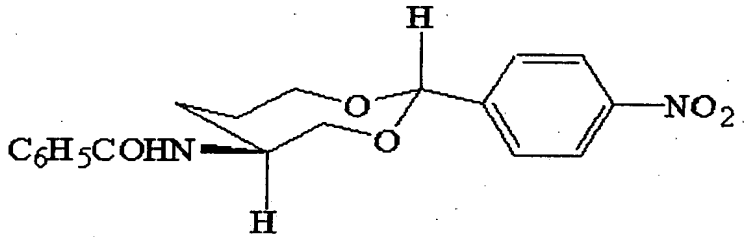


;

28. R= P-NO_2-C_6H_4 ; 33. R= P-NH_2-C_6H_4 ;







(29)

2. A compound selected from the group consisting of 5-benzoylamino-1,3-dioxacyclane derivatives represented by the formulae 22-48 described in claim 1.

3. A method of preparing the compound described in claim 2, which including a stereo-specific acetal transfer reaction between N-benzoylamino glycol and aromatic aldehyde.

4. The method of claim 3, wherein said stereo-specific acetal transfer reaction includes: preparing benzoylamino glycol (include optically active glycols) via using L-amino acid as raw material of a methyl esterification, benzoylation, and reducing reaction, and cyclizing with p-nitrobenzaldehyde or phenylacrylaldehyde to produce cylized product.

5. The method of claim 4, wherein the nitro groups in said cylized product is reduced to amino and the reduced product is obtained.

6. The method of claim 5, wherein said reduced product react with propane diacid and basic amino acid in sequence to be salified.

7. The method of claim 6, wherein said basic amino acid is L-Arg or L-Lys.